UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/619,049	07/18/00	YANDELL M	CL000735

EXAMINER	
CHUNDURU, S	
ART UNIT	PAPER NUMBER
1656	5

DATE MAILED: 09/10/01

HM12/0910

CELERA GENOMICS
ROBERT A MILLMAN PATENT DIRECTOR
45 WEST GUDE DRIVE C2-4#20
ROCKVILLE MD 20850

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary	Application N .	Applicant(s)	
	09/619,049	YANDELL, MARK D.	
	Examiner	Art Unit	
	Suryaprabha Chunduru	1656	

-- The MAILING DATE f this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 July 2000* .

2a)☐ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disp sition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) _____ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-20* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Pri rity under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Restriction/Election

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

I. Claims 1 and 2, drawn to an isolated peptide, requiring SEQ ID Nos. 1-1533, classified in class 530, subclass 350.

II. Claims 3, 14 and 17-18 drawn to an isolated antibody and a kit reagents, requiring SEQ ID Nos. 1-1533, classified in class 435, subclass 7.2 and class 536, subclass 22.1.

III. Claims 4-9, drawn to an isolated nucleic acid, expression vector and host cells, all requiring SEQ ID Nos. 1-1533, classified in class 536, subclass 23.1 and class 435 and subclass 320.1

IV. Claims 10-11, drawn to a method of producing a peptide, all requiring SEQ ID Nos. 1-1533, classified in class 435, subclass 69.1.

V. Claims 12, 13, 19-20, drawn to a method of detecting the presence of any peptide and any agent, all requiring SEQ ID Nos. 1-1533, classified in class 435, subclass 69.1.

VI. Claims 15 and 16, drawn to a method of detecting the presence of a nucleic acid, all requiring SEQ ID Nos. 1-1533, classified in class 435, subclass 6.

2. The inventions are distinct, each from the other because of the following reasons:

Inventions in Group I and IV are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the isolated peptides of Group I can be obtained from naturally occurring sources or synthetically.

Inventions in Group III and VI are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the method of detecting the presence of a nucleic acid can be used in materially different processes such as DNA purification assays.

Group I is independent from each of Groups II - VI because the isolated peptides, are materially different from (a) antibodies and a kit reagents of Group II; (b) isolated nucleic acids, vector, host cells of Group III; (c) method of producing a peptide of Group IV; (d) method of detecting the presence of a peptide or an agent of Group V; (e) method of detecting the presence of a nucleic acid of Group VI. The isolated peptides of Groups I may be obtained from naturally occurring sources or may be synthesized chemically. Neither is any of the antibodies or nucleic acids or the method steps claimed in Groups IV-VI needed to produce or practice the invention of Group I.

Group I is independent and distinct from each of groups II -III because (a) antibodies and the kit reagents of Group II can be used in in-situ hybridization assays, ligand binding assays and can be obtained from naturally occurring sources; (b) the isolated nucleic acids of Group III can be used in hybridization assays, gene therapy or mutagenesis assays.

Group II is independent and distinct from each of Groups III and I, because the isolated peptides, nucleic acids, expression vectors and host cells of Group I can be used in transfection assays, and the isolated peptides can be used in ligand-binding assays.

Group IV is independent and distinct from Group I, because the isolated peptides can be used in ligand binding or making fusion protein.

Group V is independent and distinct from Group VI because the method steps required for Group VI cannot be used to practice Group V. Further, the method of Group VI can be used in materially different processes such as gene knockout assays.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and divergent subject matter, restriction for examination purposes as indicated is proper.

In this application additionally, no matter which group applicant elects, applicant is required to specify one specific nucleotide sequence for examination. This requirement is made under 1192 O.G. 68 Notice (November 19, 1996 and revised M.P.E.P.), as the examination of more than on sequence in the application would result in an undue search burden on the PTO.

3. **Election of Species**:

This application contains claims directed to the following patentably distinct species of the claimed invention:

a. Claims 1-20 are drawn to a purified or isolated peptide, nucleic acid, expression vector, host cells consisting of an amino acid sequence selected from the group consisting of SEQ ID Nos. 3, 6, 9,.....1527, 1530 and 1533;

b. Claims 1-20 are drawn to a the amino acid sequence of an allelic variant of the amino acid shown in SEQ ID Nos. 3, 6, 9,.....1527, 1530 and 1533wherein the allelic variant is encoded by a nucleic acid that hybridizes to SEQ ID Nos. 1, 4, 7,.....1525, 1528 and 1531

c. Claims 1-20 are drawn to a the amino acid sequence of an allelic variant of the amino acid shown in SEQ ID Nos. 3, 6, 9,.....1527, 1530 and 1533wherein the allelic variant is encoded by a nucleic acid that hybridizes to SEQ ID Nos. 2, 5, 8, ...1526, 1529 and 1532

d. Claims 1-20 are drawn to an amino acid sequence of an ortholog of amino acid sequence shown in SEQ ID Nos. 3, 6, 9, ...1527, 1530, and 1533.

e. Claims 1-20 are drawn to an amino acid sequence of an ortholog encoded by a nucleic acid molecule that hybridizes to the nucleic acid sequence shown in SEQ ID Nos. 1, 4, 7....1525, 1528 and 1531.

f. Claims 1-20 are drawn to an amino acid sequence of an ortholog encoded by a nucleic acid molecule that hybridizes to the transcript sequence shown in SEQ ID Nos. 2, 5, 8,.....1525, 1528 and 1531.

g. Claim 1-20 are drawn to a fragment of the amino acid sequence shown in SEQ ID Nos. 3, 6, 9,.....1527, 1530 and 1533.

g. Claims 4-9, 11 and 15-20 are drawn to a nucleic acid that is complement of a.

h. Claims 4-9, 11 and 15-20 are drawn to a nucleic acid that is complement of b.

i. Claims 4-9, 11 and 15-20 are drawn to a nucleic acid that is complement of c.

j. Claims 4-9, 11 and 15-20 are drawn to a nucleic acid that is complement of d.

k. Claims 4-9, 11 and 15-20 are drawn to a nucleic acid that is complement of e.

l. Claims 4-9, 11 and 15-20 are drawn to a nucleic acid that is complement of f.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable

thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suryaprabha Chunduru whose telephone number is 703-305-1004. The examiner can normally be reached on 8.30A.M. - 4.30P.M, Mon - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones can be reached on 703-308-1152. The fax phone numbers for the

organization where this application or proceeding is assigned are 703-308-0294 for regular communications and - for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.

Suryaprabha Chunduru
September 5, 2001

W. Gary Jones
Supervisory Patent Examiner
Technology Center 1600
9/7/01